UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
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ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF
AIR AND RADIATION

July 31, 2001 CCD-01-12 (LDV/ LDT/ SVM/ ICI/ LIMO)

Dear Manufacturer:

Subject: Use of GF-3 Engine Oil in Test Vehicles.

This letter provides guidance regarding the use of GF-3 oils of all viscosity grades in emissions certification and fuel economy test vehicles. EPA previously issued guidance for 5W20 GF-3 oil usage in my June 26, 2000 letter (number CCD-00-06). The guidance in that letter will continue to be effective through the 2002 model year. However, starting with the 2003 model year, this letter will supercede the guidance for 5W20 GF-3 oils presented in that letter.

Background

EPA shares with manufacturers the objective of improving the fuel economy and emission performance of their products. It is of critical importance to EPA, however, that this improved performance, as measured by pre-production test vehicles for fuel economy and emission compliance demonstration, carry over to improved performance in the field. Therefore, prior to using GF-3 oils in test vehicles, manufacturers should make all reasonable efforts to ensure that these oils will be used in the field. This letter lays out a process which manufacturers can use to assure EPA that GF-3 oils will be used in the field.

Approval criteria for using GF-3 oils in test vehicles.

EPA will approve the use of a GF-3 oil in test vehicles if the following conditions are satisfied:

1. Owner's Manual Language. The manufacturer provides clear and unambiguous instructions in the Owner's Manual which identifying GF-3 non-synthetic engine oil of a specific viscosity grade (e.g., 5W20, 5W30, 10W30) as the engine oil to be used under ambient temperature conditions likely to be experienced during normal vehicle operation. It is appropriate for a manufacturer to specify the use of a lower viscosity engine oil in extremely low ambient temperatures where the normally specified oil may not flow adequately.

2. Labeling the Oil Filler Cap. The manufacturer clearly indicates on the engine oil filler cap, by label or other permanently attached means, that GF-3 oil of a specific viscosity grade (e.g. GF-3 5W20) is to be used in the engine.

3. Limits on the Sum of 16-hour plus 96-hour Fuel Economy Improvement Factors. The engine oil to be used in emissions and fuel economy test vehicles must have a combined fuel economy

improvement factor (using the ASTM Sequence VI-B (or its replacement procedure)) which does not exceed the following limits:

GF-3 5W20	4.2%
GF-3 5W30	3.4%
GF-3 10W30	2.0%

The limits were calculated as the sum of the 16-hour and 96-hour limits plus 0.5 percent. The 0.5 percent was represented by the Alliance as covering about two standard deviations of the distribution of fuel economy improvement rates measured by the ASTM procedures. EPA is setting these limits because it is inappropriate for a manufacturer to select a significantly better oil for fuel economy testing than the typical customer will be using in their vehicles.

4. Factory Fill Oil Requirements. The manufacturer uses GF-3 oil of the same viscosity rating as factory fill in production vehicles. Furthermore, the fuel economy performance of the oils used as factory fill must be equivalent or superior to the oils used in emission and fuel economy test vehicles.

5. Oils Available at Dealerships. The manufacturer supplies its dealers with GF-3 oils of the same viscosity grade as used in the test vehicles or otherwise assures the use of the appropriate viscosity grade GF-3 engine oil at dealerships. Furthermore, the fuel economy performance of the oils supplied to dealers must be equivalent or superior to the oils used in emission and fuel economy test vehicles.

6. Commitments from Oil Manufacturers to Market Appropriate Oils. Prior to the start of vehicle production, the vehicle manufacturer obtains commitments from manufacturers of engine oils that they will manufacture GF-3 engine oil of the specified viscosity grade in sufficient quantity to meet demand, market those oils through all of their marketing outlets, and promote the use of the specified oil at “quick oil change” facilities. The vehicle manufacturer shall retain this information on file for three years and shall provide EPA with copies of this information upon request.

Additional Requirements Specific to the Use of 5W20 GF-3 Oils

In addition to the six criteria listed above, manufacturers using 5W20 GF-3 oils in test vehicles must agree do to the following:

1. Instructions to“Quick Change” Facilities and the Manufacturer’s Dealers to use 5W20 GF-3 Oils. The manufacturer commits to do the following shortly after the start of the applicable model year:

a. Acquire from oil manufacturers and supply to EPA copies of materials that they supplied to "quick oil change" facilities pertaining to the use of 5W20 GF-3 engine oil.

b. Provide EPA with copies of materials that the manufacturer sent to its dealers pertaining to the use of 5W20 GF-3 engine oil in customer vehicles.

2. Follow-up Survey of 5W20 Oil Usage. The manufacturer commits to perform the following either approximately two years after the use of 5W20 engine oil is approved by EPA, or immediately prior to applying for 2004 model year certification:

a. Acquire from oil manufacturers and provide to EPA sales data of 5W20 and at least the two highest-selling oils by viscosity grade (other than 5W20), promotional information applicable to the use of 5W20 engine oil, and follow up letters of commitment for the continued promotion of 5W20 engine oil; and

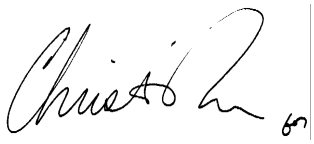
b. Acquire from oil manufacturers and provide to EPA the fuel efficiency data of their 5W20 and the highest-selling oils identified in a. above, relative to the reference oil as specified in ASTM Sequence VI-B (or its replacement procedure). This information may be collected and reported to EPA in conjunction with other vehicle manufacturers; and

c. Acquire and provide to EPA data on the retail prices of 5W20 and the highest selling oils identified in a. above. Prices of non-synthetic, partial synthetic and synthetic oils are to be included. This information may be collected and reported to EPA in conjunction with other vehicle manufacturers.

This information will be used by EPA to determine whether approval of the use of 5W20 engine oil should be extended beyond the 2003 model year.

If you have any questions, please contact Mr. Eldert Bontekoe at (734) 214-4442.

Sincerely,



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